DERWENT-ACC-NO: 2004-362653

DERWENT-WEEK: 200434

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TITLE: <u>Test</u> method of multi-chip package using monitor burn-in <u>tester</u>

INVENTOR: BANG, J H; CHOI, S Y ; JUNG, J S ; KIM, N M ; PARK, D G ; YOON, G J

PATENT-ASSIGNEE: SAMSUNG ELECTRONICS CO LTD[SMSU]

PRIORITY-DATA: 2002KR-0036073 (June 26, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 2004001017 A	January 7, 2004	N/A	001	G01R 031/26

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
KR2004001017A	N/A	2002KR-0036073	June 26, 2002

INT-CL (IPC): G01R031/26

ABSTRACTED-PUB-NO: KR2004001017A

BASIC-ABSTRACT:

NOVELTY - A <u>test</u> method of a multi-chip package using a monitor burn-in <u>tester</u> is provided to reduce <u>test</u> time and increase <u>test</u> efficiency.

DETAILED DESCRIPTION - A multi-chip package having at least two <u>semiconductor</u> devices, is <u>tested</u> by using a monitor burn-in <u>tester</u>. One <u>test</u> program is used for carrying out the multi-chip package <u>test</u>. Each <u>semiconductor</u> device is sequentially carried out with the <u>test</u> after contacting a plurality of <u>test</u> pins to the <u>semiconductor</u>

devices(100,200,400,600). The **test** program has a multiplexer control
function capable of selecting all the multiplexer functions included
to the **semiconductor** devices. The **test program** includes an
input/output **masking function** for masking the input/output port of a
test board unused by the different input/output ports of the
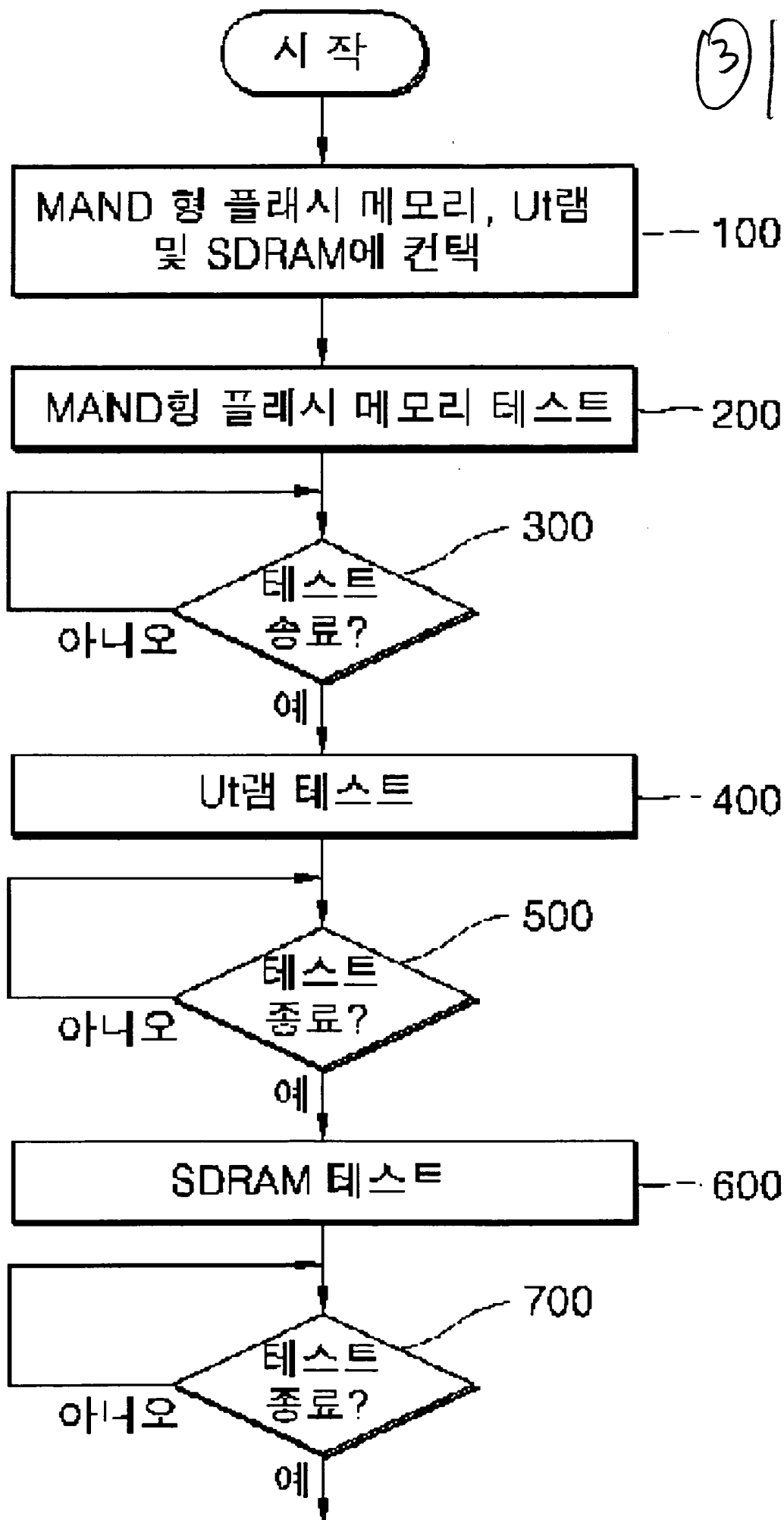**semiconductor** devices.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: **TEST** METHOD MULTI CHIP PACKAGE MONITOR BURN **TEST**

DERWENT-CLASS: S01 U11

EPI-CODES: S01-G01A3; U11-F01C3;

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      ┌──────────────┐
      │    시 작      │
      └──────────────┘
             │
             ▼
 ┌─────────────────────────────┐
 │  MAND 형 플래시 메모리, Ut램   │ ── 100
 │     및 SDRAM에 컨택           │
 └─────────────────────────────┘
             │
             ▼
 ┌─────────────────────────────┐
 │  MAND힝 플레시 메모리 테스트   │ ── 200
 └─────────────────────────────┘
             │
             ▼
          ◇ 테스트          300
   아니오 ◇ 송료? ◇
             │ 예
             ▼
 ┌─────────────────────────────┐
 │       Ut램 테스트            │ ── 400
 └─────────────────────────────┘
             │
             ▼
          ◇ 테스트          500
   아니오 ◇ 종료? ◇
             │ 예
             ▼
 ┌─────────────────────────────┐
 │       SDRAM 테스트          │ ── 600
 └─────────────────────────────┘
             │
             ▼
          ◇ 테스트          700
   아니오 ◇ 종료? ◇
             │ 예
             ▼
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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"20040145387"	US-PGPUB; USPAT	OR	ON	2005/05/26 16:54
S2	4876	324/765,158.1.ccls.	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S3	2715	324/765.ccls.	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S4	2651	324/158.1.ccls.	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S5	490	S3 and S4	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S6	42	S5 and load$4 and unload$4	US-PGPUB; USPAT	OR	ON	2005/02/22 14:48
S7	16	S5 and load$4 and unload$4 and sort$4	US-PGPUB; USPAT	OR	ON	2005/02/22 14:48
S8	1	"20040112142"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:54
S9	1	"20010026152"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:57
S10	2	"6462534"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:52
S11	1	"20030115519"	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:03
S12	1	"20040119491"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:44
S13	1	"20050007140"	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:04
S14	1	"20040207387"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:46
S15	6	(bang near jeong).in. and scan	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:05
S16	13	(bang near jeong).in. and scan$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:06
S17	0	(bang near jeong).in. and scan$4 and burn adj in	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:48
S18	1	(bang near jeong).in. and scan$4 and burn$2in	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:48
S19	0	(S8 S9 S10 S11 S12 S13 S14)	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:52
S20	0	(S8 S9 S10 S11 S12 S13 S14) scan	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:54
S21	0	S8 scan	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:54
S22	0	S9 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53

S23	0	S8 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S24	0	S10 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S25	0	S11 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S26	0	S12 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S27	0	S13 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S28	0	S14 scan$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S29	0	(S8 S9 S10 S11 S12 S13 S14) package	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:54
S30	1	S8 package	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:55
S31	1	S8 package	US-PGPUB; USPAT	AND	ON	2005/05/23 14:55
S32	13	(bang near jeong).in. and scan$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:06
S33	3	(bang near jeong).in. and scan$4 and program	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:06
S34	3	(bang near jeong).in. and scan$4 and program	US-PGPUB; USPAT	OR	ON	2005/05/23 15:06
S35	1812	burn$1in and mask$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:20
S36	67	(burn$1in and mask$4).ab,clm.	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:20
S37	10728	sram same dram	USPAT	OR	OFF	2005/05/23 17:30
S38	186	439/81.ccls.	USPAT	OR	OFF	2005/05/23 17:08
S39	511	sram same dram same test$4	USPAT	OR	OFF	2005/05/23 17:30
S40	28	sram same dram same test$4 same multiplex$4	USPAT	OR	OFF	2005/05/23 17:32
S41	733	365/201.ccls. and (mux multiplex$4)	USPAT	OR	OFF	2005/05/23 17:33
S42	123	365/201.ccls. and (mux multiplex$4) and sram and dram	USPAT	OR	OFF	2005/05/23 17:33
S43	18	365/201.ccls. and (mux multiplex$4) and sram and dram and burn$4	USPAT	OR	OFF	2005/05/23 17:48
S44	8	324/760.ccls. and test$4 with (different multiple) with types with semiconductor	USPAT	OR	OFF	2005/05/23 17:55
S45	9	365/201.ccls. and test$4 with (different multiple) with types with semiconductor	USPAT	OR	OFF	2005/05/23 17:55

S46	7	(bang near jeong).in. and multiplex$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:08
S47	1103	multiplex$4 same masking	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:09
S48	44	multiplex$4 same masking and burn$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:09
S49	37	(test$4 with multi$1chip).ti.	USPAT	OR	OFF	2005/05/25 15:11
S50	26	(test$4 with multi adj chip).ti.	USPAT	OR	OFF	2005/05/25 15:23
S51	25	S49 and S50	USPAT	OR	OFF	2005/05/25 15:08
S52	1	S50 not S51	USPAT	OR	OFF	2005/05/25 15:08
S53	4	(test$4 with multi$1chip with type).ti.	USPAT	OR	OFF	2005/05/25 15:09
S54	10	(test$4 with multi$1chip).ti. and burn-in	USPAT	OR	OFF	2005/05/25 15:11
S55	1	(test$4 with multi$1chip).ti. and burn adj in	USPAT	OR	OFF	2005/05/25 15:11
S56	0	(test$4 with multi adj chip).ti. and nurn-in	USPAT	OR	OFF	2005/05/25 15:21
S57	6	(test$4 with multi adj chip).ti. and burn-in	USPAT	OR	OFF	2005/05/25 15:21
S58	3	(test$4 with mcm).ti.	USPAT	OR	OFF	2005/05/25 15:24
S59	0	test$4 with different with temperature same multi adj cipp	USPAT	OR	OFF	2005/05/25 15:25
S60	0	test$4 with different with temperature same multi adj chip	USPAT	OR	OFF	2005/05/25 15:26
S61	0	test$4 with different with temperature same multi-chip	USPAT	OR	OFF	2005/05/25 15:26
S62	0	test$4 with different with temperature same mcm	USPAT	OR	OFF	2005/05/25 15:26
S63	0	test$4 with different with temperature same mcm	USPAT	OR	ON	2005/05/25 15:26
S64	0	test$4 with different with temperature same mcm	US-PGPUB; USPAT	OR	ON	2005/05/25 15:26
S65	1	test$4 with different with temperature same multi-chip	US-PGPUB; USPAT	OR	OFF	2005/05/25 15:26
S66	1	test$4 with different with temperature same multi adj chip	US-PGPUB; USPAT	OR	OFF	2005/05/25 15:26
S67	1	test$4 same different with temperature same multi adj chip	US-PGPUB; USPAT	OR	OFF	2005/05/25 15:27
S68	0	test$4 same different with temperature same multi adj chip	USOCR	OR	OFF	2005/05/25 15:27
S69	0	test$4 same different with temperature same multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/25 15:27

S70	2	different with temperature same multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:04
S71	0	temperature same different with type with multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/25 15:28
S72	2	different with type with multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/25 15:29
S73	87	different with type with multi adj chip	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:29
S74	6	S73 and "324"/$.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:30
S75	7	("4556975").PN. OR ("6198663"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:39
S76	57	324/760.ccls. and (mcm (multi adj chip))	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:40
S77	5	324/760.ccls. and (mcm (multi adj chip)) and different with temperature	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:41
S78	52	S76 not S77	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:54
S79	132	257/48.ccls. and burn-in	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:54
S80	10	257/48.ccls. and burn-in and different with temperature	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/25 15:54
S82	1	(SDRAM DRAM different temperature).clm.	US-PGPUB; USPAT	AND	ON	2005/05/26 16:55
S83	0	(SDRAM DRAM different with temperature).clm.	US-PGPUB; USPAT	AND	ON	2005/05/26 17:12
S84	23	(test$4 plurality with semiconductor different with temperature).clm.	US-PGPUB; USPAT	AND	ON	2005/05/26 17:00
S85	270	SDRAM DRAM different with temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 17:16
S86	0	SDRAM DRAM different with temperature	USOCR	AND	ON	2005/05/26 17:13
S87	1	SDRAM DRAM different with temperature	EPO; JPO; DERWENT; IBM_TDB	AND	ON	2005/05/26 17:13
S88	108	SDRAM DRAM module different with temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 17:37

S89	77	SDRAM same DRAM module different with temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 17:52
S90	47	testing adj mcm	US-PGPUB; USPAT	AND	ON	2005/05/26 17:52
S91	4	testing adj mcm sdram dram	US-PGPUB; USPAT	AND	ON	2005/05/26 18:06
S92	15	("5137836" | "5539752" | "5796746" | "5807762" | "5817535" | "5844803" | "5856923" | "5907492" | "5915231" | "5927512" | "6067507").PN. OR ("6238942"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 17:56
S93	0	testing adj muiti-chip adj module sdram dram	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S94	0	testing adj multi-chip adj module sdram dram	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S95	47	testing adj multi-chip adj module	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S96	44	S95 not S90	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S97	3	S95 S90	US-PGPUB; USPAT	AND	ON	2005/05/26 18:08
S98	91	S95 or S90	US-PGPUB; USPAT	AND	ON	2005/05/26 18:09
S99	22	S98 and different adj type	US-PGPUB; USPAT	AND	ON	2005/05/26 18:26
S101	20	(test$4 adj program) (different adj type) (mcm or multi-chip)	US-PGPUB; USPAT	AND	ON	2005/05/26 18:28
S102	5	(test$4 adj program) (different adj type) (mcm or multi-chip) temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 18:31
S103	15	S101 not S102	US-PGPUB; USPAT	AND	ON	2005/05/26 19:07
S104	879	package with multiple with type	US-PGPUB; USPAT	AND	ON	2005/05/26 19:07
S105	0	package with multiple with type and dram and dsram and dimm	US-PGPUB; USPAT	AND	ON	2005/05/26 19:08
S106	0	package with multiple with type and dram and sdram and dimm	US-PGPUB; USPAT	AND	ON	2005/05/26 19:08
S107	31	package with multiple with type same (dram or sdram or dimm)	US-PGPUB; USPAT	AND	ON	2005/05/26 19:15
S108	0	package with multiple with type same (dram or sdram or dimm) and program	US-PGPUB; USPAT	AND	ON	2005/05/26 19:15
S109	0	package with multiple with type same (dram or sdram or dimm) and programm	US-PGPUB; USPAT	AND	ON	2005/05/26 19:15

S11 0	5	package with multiple with type same (dram or sdram or dimm) and test$4	US-PGPUB; USPAT	AND	ON	2005/05/26 19:35
S11 1	4	(US-6214641-$ or US-5998865-$ or US-5817535-$ or US-5723907-$). did.	USPAT	OR	OFF	2005/05/26 19:31
S11 2	86	("4992849" | "4992850" | "4996587" | "5107328" | "5137836" | "5162947" | "5239198" | "5255156" | "5280192" | "5418687" | "5465470" | "5477082" | "5480840" | "5495398" | "5610767" | "5687028").PN. OR ("5723907" | "5817535" | "5998865" | "6214641").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:31
S11 3	0	S112 and sdram and dram and test$4 and program	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:32
S11 4	0	S112 and sdram and test$4 and program	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:32
S11 5	0	S112 and sdram and test$4 and program	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/26 19:32
S11 6	0	S112 and test$4 and program	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/26 19:32
S11 7	6	S112 and sdram and dram and test$4	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:33
S11 8	1	package with multiple with type same (dram or sdram) and test$4	US-PGPUB; USPAT	AND	ON	2005/05/26 19:39
S11 9	0	(test$4 with (simm or dimm) with sdram dram).ti.	US-PGPUB; USPAT	AND	ON	2005/05/26 19:40
S12 0	0	(test$4 with (simm or dimm)).ti.	US-PGPUB; USPAT	AND	ON	2005/05/26 19:40
S12 1	9	(test$4 with (simm or dimm)).ab.	US-PGPUB; USPAT	AND	ON	2005/05/26 19:40
S12 2	0	257/777.ccls. and (sram with dram with non$1volatile)	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:06
S12 3	0	257/777.ccls. and (sram with dram or non$1volatile)	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:06
S12 4	0	257/777.ccls. and (sram with dram)	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:06

S12 5	6	257/777.ccls. and (sram with dram with non$1volatile)	US-PGPUB; USPAT; USOCR	OR	OFF	2005/10/07 14:06
S12 6	6	257/777.ccls. and (sram with dram with non$1volatile)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:26
S12 7	0	257/777.ccls. and (sram with dram with test$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:14
S12 8	386	(sram with dram with test$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:14
S12 9	20	(sram with dram with test$4 with package$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:14
S13 0	5	(sram with dram with test$4 with package$4 and temperature)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:15
S13 1	32	("4503537" | "4513418" | "5255229" | "5297087" | "5375091" | "5381373" | "5390129" | "5424988" | "5535164" | "5557573" | "5563833" | "5577051" | "5590079" | "5592422" | "5610866" | "5615164" | "5619462" | "5629943" | "5633877" | "5638331" | "5654925" | "5657282" | "5659551" | "5668770").PN. OR ("6122760").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/10/07 14:19
S13 2	59	257/777.ccls. and (test$4).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:54
S13 3	0	257/777.ccls. and (test$4 with different with temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:54
S13 4	2	257/777.ccls. and (test$4 with temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:42
S13 5	1	"6198663".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:47
S13 6	1	"5931311".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:47
S13 7	0	257/777.ccls. and (test$4 and different with temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:55
S13 8	0	257/777.ccls. and (test$4 and program and temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:55

S139	1	257/777.ccls. and (test$4 and program).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:55
S140	1	"6014316".pn.	USPAT	OR	OFF	2005/10/16 14:43
S141	74	mask$4 adj function with block$4	USPAT	OR	OFF	2005/10/16 17:18
S142	0	mask$4 adj function with block$4 and burn$1in	USPAT	OR	OFF	2005/10/16 17:18
S143	0	mask$4 adj function with block$4 and burn adj in	USPAT	OR	OFF	2005/10/16 17:18
S144	2	mask$4 adj function with block$4 and burn	USPAT	OR	OFF	2005/10/16 17:19
S145	13	mask$4 adj function with block$4 and test	USPAT	OR	OFF	2005/10/16 17:19
S146	25	mask$4 adj function with block$4 and test	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:19
S147	31	mask$4 adj function with block$4 and test$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:19
S148	17	mask$4 adj function with block$4 and test$4 and (semiconductor or integrated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:19
S150	5	S145 and (semiconductor or integrated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:22
S151	12	S148 not S150	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:27
S152	1	test adj program with block$4 adj function	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:28

S15 3	1	test adj program with block$4 adj function	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/16 17:28
S15 4	143	program with block$4 adj function	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:28
S15 5	61	program with block$4 adj function and (semiconductor or integrated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:29
S15 6	36	program with block$4 adj function and (semiconductor or integrated) and test$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:31
S15 7	1	program with block$4 adj function and (semiconductor or integrated) and test$4 and burn$1in	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:29
S15 8	41	program with block$4 adj function and package and test$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/16 17:30
S15 9	24	S156 and S158	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/16 17:30
S16 0	7	program with mask$4 adj function and (semiconductor or integrated) and test$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:58

S16 1	1	S159 and S160	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:31
S16 2	1	2004-362653.NRAN.	DERWENT	OR	OFF	2005/10/16 17:53
S16 3	1	kr2004001017a	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:59
S16 4	1	KR2004001017A	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:59